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Type Studies in the Polyporaceae 14. Species Described by N. Patouillard, Either Alone or with other Mycologists

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TYPE STUDIES IN THE POLYPORACEAE 14. SPECIES DESCRIBED BY N. PATOUILLARD, EITHER ALONE OR WITH OTHER MYCOLOGISTS

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SUMMARY

Patouillard described 235 polypores of which 44 are accepted; 161 are regarded as synonyms. The type specimens of 17 species could not be located, and 11 are in such a bad condition that they could not be identified or described properly. The names of two species are invalid. The following new combinations are proposed: *Antrodia eutelea* (Har. & Pat.) Ryv., *Aurificaria euphoriae* (Pat.) Ryv., *Coltricia duportii* (Pat.) Ryv., *Hyphodontia brevidens* (Pat.) Ryv., *Inonotus pseudoradiatus* (Pat.) Ryv., *Perenniporia isabellina* (Pat. ex Sacc.) Ryv., *P. roseoisabellina* (Pat. & Gail.) Ryv., *Rigidoporus crocatus* (Pat.) Ryv., *Spongipellis caseosus* (Pat.) Ryv., *Tyromyces caesioflavus* (Pat.) Ryv., *T. eberhardtii* (Pat.) Ryv. and *Wrightoporia iobaphus* (Pat.) Ryv.

The French mycologist N. Patouillard was extremely industrious and published a long series of mycological papers, most of them based on tropical and subtropical collections. His collected mycological papers have been published in 3 volumes (Patouillard 1876-1924).

He described 1100 new species and 111 new genera in all. An annotated index to his new species and genera was published by Pfister (1977) with a later supplement (Pfister 1980). Pfister (1977) also gave a survey of Patouillard's work and life with references to previous bibliographies. Patouillard's herbarium was purchased by the Farlow Herbarium at Harvard in 1927 where it is kept today, separate from the general collection. The type specimens of some of his earlier and very late species are, however, in the Paris Herbarium. The reader is referred to Pfister's list (op. cit.) for information about where to find his type specimens and how they are numbered.

In the following list, the species are placed in the same order as in Pfister's list, i.e. alphabetically according to specific epithet. The genera are abbreviated as follows:

C. = *Coriolus*, *D.* = *Daedalea*, *El.* = *Elmerina*, *F.* = *Favolus*, *Fun.* = *Funalia*, *G.* = *Ganoderma*, *H.* = *Hexagonia*, *I.* = *Irpex*, *L.* = *Lenzites*, *Lep.* = *Leptoporus*, *Leucop.* = *Leucoporus*, *Mel.* = *Melanopus*, *P.* = *Polyporus*, *Porog.* = *Porogramme*, *Ph.* = *Phellinus*, *Pseudof.* = *Pseudofavolus*, *S.* = *Spongipellis*, *T.* = *Trametes*, *X.* = *Xanthocrous*.

Most of the polypores treated here were described by Patouillard alone, and no author is then cited. Otherwise the proper combinations of authors are cited after the specific epithet. Following each specific epithet there is a reference to where the species was published. To shorten the references and save space, most of the journals have been abbreviated as follows:

ACE = Ann. Crypt. Exot., AJB = Ann. Jard. Bot. Buitenzorg, AM = Annales

Mycolgici, BHB = Bull. Herb. Boiss., BJJ = Bull. Jard. Col. Ess. Col. Fr., BMP = Bull. Mus. Hist. Natur. Paris, BSMF = Bull. Soc. mycol. Fr., JB = J. Bot. (Morot), PSSC = Phillip. J. Sci. Ser. C Bot., RM = Rev. mycol.

The label, except for the name, is then cited in quotation marks, and if the type locality is not evident, it is cited in brackets. If the type specimen was found to represent a specimen of a previously described species, this is indicated by "=" followed by a correct citation of the name in question.

When Patouillard's species has been accepted, it is cited in its proper genus with a reference to a recent description, or is described in detail if none seems to exist.

H. aequalis, JB 3:258, 1889.
"San Carlos de Rio Negro [Venezuela], Oct. 1888. L. Savoye."
= *Daedalea sprucei* Berk.

P. albo-badius, JB 5:311, 1891.
"Ke So (Ha Noi) [Viet Nam], juin 1890. Bon 4429."
= *Trametes marianna* (Pers.) Ryv.

P. albidulus Pat. & Gail., BSMF 4:33, 1888.
The type specimen has not been found.

G. albocinctum Pat. in Pat. & Morot, JB 8:365, 1894.
"Kitabi, Congo, leg. Lecomte 1893."
= *Ganoderma chalceum* (Cooke) Steyaert, teste Steyaert in herb. FH.

C. albofuscus, BSMF 23:81, 1907.
"Guinée Française, Leg. Boué 1905-06."
= *Ganoderma chalceum* (Cooke) Steyaert.

P. alboincarnatus Pat. & Gail., BSMF 4:35, 1888 (isotype in NY).
"Puerto Zamero [Venezuela], juillet 87."
= *Perenniporia medulla-panis* (Fr.) Donk as already indicated by Lowe (1966:59).

G. alluaudi Pat. & Har., BSMF 22:117, 1906. FIG. 1 A-C.
"Afrique orientale, Nairobi, Kikuyi [Kenya], Alluaud."
= Accepted species in *Ganoderma*.

Fruitbody centrally to laterally stipitate, pileus circular to semi-circular, up to 8 cm in diameter and 1.5 cm thick at the base, flat with a steep and almost vertical margin. Surface glossy, black, deep bay to purplish with a cuticle which is easily dented with a nail, concentrically sulcate and especially at the margin radially furrowed. Stipe 8-20 cm long, 0.4-2 cm in diameter, of even thickness, glossy laccate and of same color as pileus. Pore surface white to cream, ochraceous in old specimens, pores angular, 3-4 per mm, tubes pale brown, up to 7 mm deep. Context both in stipe and pileus cream to pale brown, the latter close to the tubes and in the stipe.

Hyphal system trimitic, generative hyphae 2-4 μm wide and with clamps, dendroid, skeletal hyphae dominating, hyaline, 3-7 μm wide in main stems,

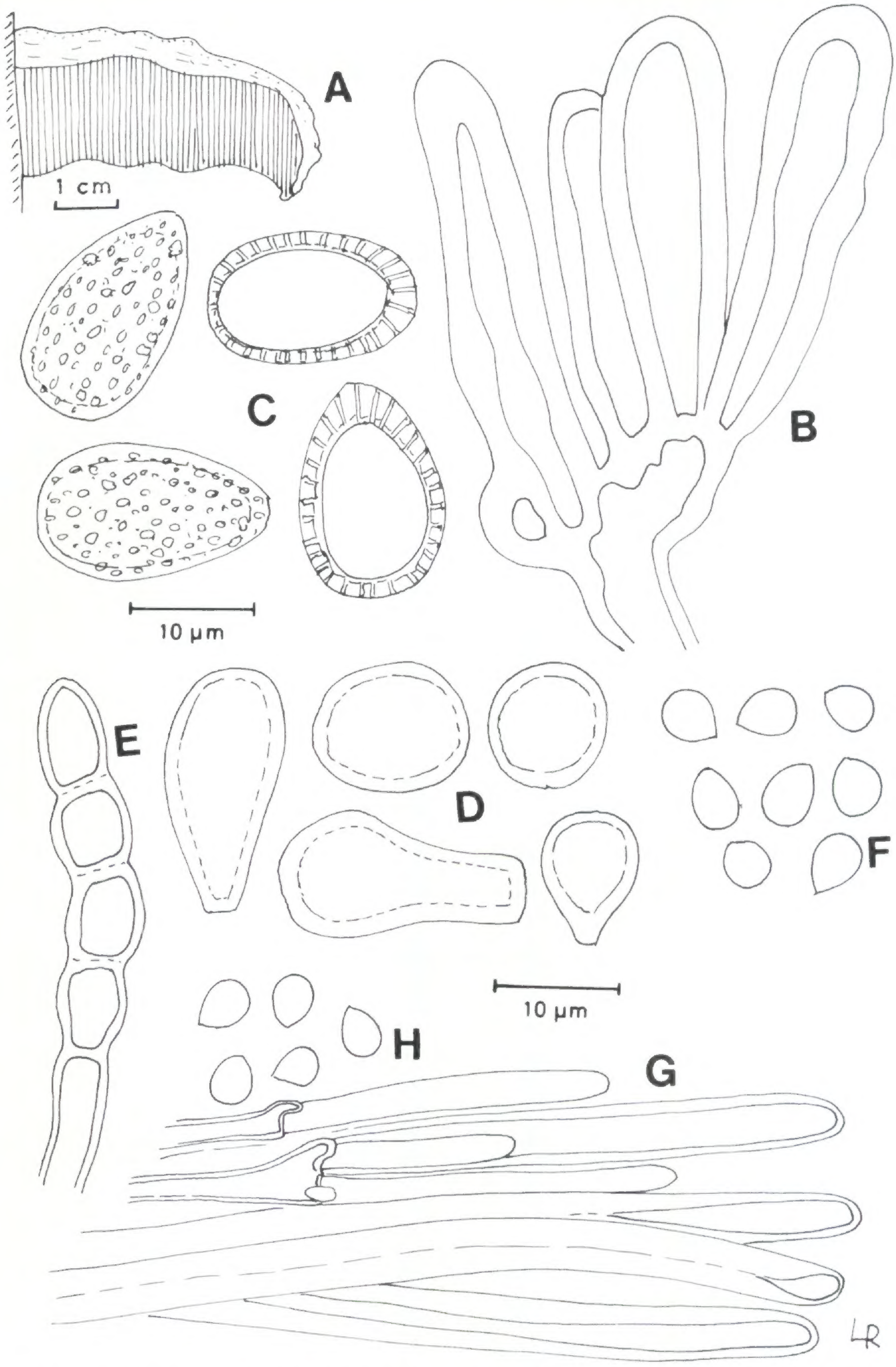

FIG. 1. *Ganoderma alluaudii* A) fruitbody, B) elements from the pileus, C) spores. *Phellinus bambusinus* D) conidia, E) initial development of conidia, F) basidiospores. *Hyphodontia brevidens* G) spores, H) thick-walled cystidia from the aculei. From the type specimens.

binding hyphae scattered, most easily seen in the stipe, 2-4 μm wide and with whip-like ends. Pileus cuticle of clavate thick-walled elements 40-50 μm × 7-10 μm. Spores truncate, finely reticulate, yellow, 11-15 × 7.5-10 μm. On the ground.

The species is characterized by its thick pileus with a steep margin, the large tapering spores and the thick and long clavate elements of the pileus. The stipe is unusually long in relationship to the small pileus.

Leucop. ameides, PSSC 10:89, 1915.
"On rotten log, Mt. Maquiling, Prov. Laguna Dec. 10/13. C. Baker."
= *Polyporus philippinensis* Berk.

Lep. alutaeformis, BSMF 36:4, 1920.
Type specimen not found. The name is not mentioned in Donk 1974.

H. amplexens, BSMF 18:299, 1902.
"Nouvelle Calédonie."
= *Hexagonia vesparius* (Berk.) Ryv.

T. andina Pat. in Pat. & Lagerheim, BSMF 11:208, 1895.
"San Jorge, Equateur, Leg. Lagerheim, sur vieux tronc."
= *Coriolopsis polyzona* (Pers.) Ryv.

F. annamensis Pat. in Heim, BSMF 43:32, 1927.
"Annam [Viet Nam], Massif de la Mere et l'Enfant. Poilane no. 6642 (PC)."
= *Polyporus udus* Jungh.

S. annamiticus, BMP 30:334, 1923.
"Annam [Viet Nam], Hoha Trang, Moi, Bucit Bru, 4, juill. 1922. Poilane no. 4403."

The type specimen is sterile, very dense with resinous soaked zones in the context. The color is dirty brown now, but when fresh it was reported on the label to have been pure white. When manipulated it turned rose, and the natives used it for food. The dark color may be due to some chemical treatment.

The macromorphology clearly indicates that this is the same as *Spongipellis eberhardtii* which Patouillard described from the same area three years earlier. For a description, see this species.

T. aratoides Har. & Pat., JB 17:8, 1903.
"*Nouvelle Calédonie.*"
= *Phellinus discipes* (Berk.) Ryv.

P. arcuatus, JB 3:256, 1889.
"Nouvelle Calédonie."
= *Trametes menziesii* (Berk.) Ryv.

Lep. armatus, PSSC 10:91, 1915.
"Summit of Mt. Maquiling, Prov. Laguna (Philippine Islands), June 14."
= *Rigidoporus microporus* (Fr.) Overeem.

Lep. asperulus, BSMF 23:82, 1907.
"Tessoua [Sudan], 18 mai 1906. M. Chudeau."
= *Trametes cingulata* Berk.
Leucop. asperulus Pat. in Pat. & Har., JB 17:7, 1903.
"Nouvelle Calédonie."
= *Microporellus obovatus* (Jungh.) Ryv.
T. atra, BSMF 22:49, 1906.
"Tahiti, Seurat."
= *Perenniporis detritus* (Berk.) Ryv.
P. aureonitens Pat. in Peck, Ann. Rep. N.Y. St. Mus. 42:121, 1889.
"locus Sandlake, N.Y. [U.S.A.], C. H. Peck."
= *Inonotus radiatus* (Fr.) Karst., as indicated by Pegler (1964:181).
Pseudof. auriculatus, BSMF 24:4, 1908.
"Langlois, St. Martinsville, La. [U.S.A.], 1.8.1898."
= *Pseudofavolus miquelii* (Mont.) Pat.
P. baccharides Pat. in Pat. & Lagerheim, BSMF 9:129, 1893.
"Sur *Baccharis longifolia*, Equateur, fev. 1892. Leg. Lagerheim."
= Accepted species as *Phellinus baccharides* (Pat.) Pat., Essai tax. p. 97, 1900. For a description see Ryvarden & Johansen (1980:142).
G. bakeri, PSSC 10:96, 1915.
"On dead log, Los Baños, Prov. Laguna (Philippine Isl.) Dec. 1/13, Baker 2104."
= *Ganoderma mirabilis* (Lloyd) Humphrey.

There is a short description in Steyaert (1972:72) which however lacks many important features. Thus, a complete description is given here.

Fruitbody laterally stipitate, pileus semicircular to round, up to 20 cm in diameter, 2 cm thick close to the base, woody hard when dry, applanate, dull, rugulose, slightly folded radially, dark brown in different shades, margin pale brown with a few sulcate zones, in section with a dark brown thin cuticle, 0.2-1 mm thick. Stipe dark brown and with the same type of crust as on the pileus. Pore surface ochraceous to cream, pores angular, rather thin-walled, 3-4 per mm, tubes cream to ochraceous, up to 1 cm deep. Context cream to ochraceous 2-5 mm deep, sharply delimited towards the upper crust.

Hyphal system trimitic, generative hyphae with clamps, 2-5 μm wide, context and trama composed of arboriform skeletal hyphae, up to 7 μm wide in main stems, binding hyphae scattered, 3-4 μm wide. Cuticle composed of compacted hyphae and mixed with black to dark brown melanoid substances and no distinct structure can be seen, and sections will fragment to brown pieces. Spores subglobose and weakly truncate, strongly reticulated, partly in sinuous bands, partly as distinct aculei, pale brown in KOH, 7-9 × 6-8 μm.

The small, strongly reticulated and subglobose spores, the light-colored

context with a dark crust without distinct structure and the relatively large pores are distinct features of this species. *Fomes fusco-pallens* Bres. is also a synonym as already indicated by Lloyd (1922:1132).

Lep. bakeri, PSSC 10:91, 1915.

"On rotten trunk, Mt. Maquiling, May 14/14. Baker 3325."

= *Rigidoporus microporus* (Fr.) Overeem.

P. conchatus var. *bambusae* Pat. in Pat. & Lagerheim, BHB 3:54, 1895.

"San Jorge, Equateur. Sur Chusquea. Lagerheim, juillet 1892."

= *Phellinus* sp. The type specimen is badly developed and sterile.

P. bambusinus, BSMF 7:101, 1891.

"Ke So, Tonkin [Viet Nam], 23 aout 1890 in vetustus bamboo. Bon 4481." Selected as lectotype.

It might be debated whether this species is validly described. Patouillard gave no formal description in his paper which had the title, "Polyporus bambusinus, noveau polypore conidifere." Thus, it is clear that he intended to describe a new species. The only sentence in his paper which may be taken as a diagnosis is the following: "Je decriai donc sous le nom de *Polyporus bambusinus* pour rappeler son habitat." To avoid confusion, I accept the sentence as a diagnosis and thus, the species as validly published.

If Patouillard's name is rejected as a *nomen nudum*, Saccardo (1895:88) has to be accepted as the validating author since he gave a Latin diagnosis, although he referred to Patouillard's previous name.

Later Patouillard (1900:97) transferred the species to *Phellinus* which is the genus in which it is accepted today.

The original collection consisted of three different specimens, and they were called "Form normale dimidée" (Bon 4390), "form noduleuse" (Bon 4477) and "une form resupiné" (Bon 4481).

The nodulose form (Bon 4477) is a specimen of *Phellinus contiguus* (Fr.) Pat. Already Patouillard discovered it to be different from the other two collections, but thought it to be within the normal variation of his new species. The other two collections represent the same taxon and Bon 4481 has been selected as lectotype, since it is fertile and Bon 4390 is sterile. In both collections the characteristic conidiospores are abundantly present.

Ph. bambusinus (Pat.) Pat., Essai Tax. p. 97, 1900. FIG. 1 D, E.

"Ha Hoi, Tonkin [Viet Nam], Bon."

≡ *Polyporus bambusinus* Pat., BSMF 7:101, 1891.

Fruitbody pileate, reflexed to resupinate, annual to perennial, hard and dense, rarely above 2 cm in diameter. Pileus up to 1 cm wide, 2 cm long, 4 mm thick at the base, dark to rusty brown in numerous narrow, velutinate to tomentose zones, at the base in the type glabrous and blackish. Margin of pileus sharp and wavy. Margin of effused and resupinate parts wide and floccose, rusty brown and in parts covered with a grainy rusty powder of

conidiospores. Pore surface rusty brown, pores small and round, 7-8 per mm, tubes concolorous, up to 1 mm deep. Context duplex, lower part rusty brown, dense, above which there is a thin, but distinct black zone superimposed by a very thin layer of loose hyphae. It is this loose layer that has disappeared at the base where consequently the black zone has been exposed. Whether this is a normal feature remains to be seen.

Hyphal system dimitic, generative hyphae thin-walled, 2-3 μm wide and with simple septa. Skeletal hyphae abundant, yellow brown, thick-walled, sinuous 2-4 μm wide. Setae not seen. Basidiospores thin-walled, hyaline, globose to subglobose with a distinct apiculus, 4-5 μm in diameter. Conidiospores present, scattered and few in the trama, very abundant in the sterile margin, globose to oblong, in some cases even arising in chains, thick-walled, pale brown to deep rusty brown, 5-14 μm in diameter or in longest dimension. Known only to occur on bamboo and from Viet Nam.

Besides the specimens cited above, 5 other collections were examined, all collected by Bon from the same area in 1890-91. In the Paris Herbarium there is also a collection: "Tonkin, Cho Gangh. Leg. L. Dryon, reçu en Paris 1918."

With its small duplex fruitbodies, the species comes close to *Ph. pectinatus* and *Ph. pullus*, but is separated by larger basidiospores, the presence of conidiospores and the substrate.

F. baudonii, BSMF 30:337, 1914.

"Sur le terre dies plantations, Les M'Brés. Baudon, no. 1616. 25 mai 1912."

= *Pseudophaeolus baudonii* (Pat.) Ryv. For a description, see Ryvarden & Johansen (1980:519).

G. bavianum, JB 4:19, 1890.

"Tonkin [Viet Nam], Vallee de Lankok, Mt. Bavi, 12 juin 1888."

= *Amauroderma rugosum* (Blume et Nees ex Fr.) Torr.

X. bernieri Har. & Pat. in Pat. & Har., JB 17:9, 1903.

"Sur tronc pourris, Ile de Pins (Nouvelle Calédonie)."

= *Oxyporus mollissimus* (Pat.) Reid.

Ph. bolaris Pat. in Heim, BSMF 43:29, 1927.

"Annam [Viet Nam], Massif de Doug Che. Quang Tri. 24.5.24. Poilane 10576."

= *Phellinus gilvus* (Schw.) Pat. as pointed out already by Patouillard in the original diagnosis.

P. boleticeus Pat. & Gail., BSMF 4:29, 1888.

"San Fernando de Albayo, Haut Orénoque [Venezuela]."

= *Amauroderma boleticeus* (Pat. & Gail.) Torr., Broteria Bot. 18:132, 1920.

For a modern description, see Furtado (1981:29).

T. bombycina, JB 3:166, 1889.
"Saigon [Viet Nam], M. Henry 1887. Coll. 122. Comm. Ed. Bonet."
= *Oxyporus cervino-gilvus* (Jungh.) Ryv.
P. bonianus, JB 5:311, 1891.
"M. Bon no. 3960, Tonkin [Viet Nam]."
= *Phellinus pectinatus* (Kl.) Quél.
G. boninense, BSMF 5:72, 1889. FIG. 2 A, B.
"C. Wright. Coll. Bonin Islands." Selected as neotype.

The species is not included in Pfister (1977). In his description Patouillard refers to a description in J. Bot. 1887 as *G. lucidum* var. This is an error as he in the latter journal on page 170 only mentions a specimen from Bonin Islands as deviating from *G. lucidum* without actually giving it any taxonomic designation.

Fruitbody pileate, broadly attached, in type specimen, somewhat hoof-shaped, semicircular about 4 cm wide and 3.5 cm thick at the base, as hard as wood, pileus glabrous, smooth, shiny and concentrically zoned, reddish bay. Cuticle dark, reddish up to 0.3 mm thick. Pore surface umber brown, paler towards the margin, pores 5-6 per mm, tubes up to 15 mm deep, reddish brown, context 1-12 mm thick, pale reddish brown to pale cinnamon towards the pileus.

Hyphal system trimitic, generative hyphae with clamps, 2-3 μm wide, binding hyphae scattered 2-4 μm wide, skeletal hyphae yellow, solid 2-5 μm wide, arboriform in upper part. Crust composed of a palisade of hyphal ends, dark brown, thick-walled and irregular club-shaped with swellings and small protuberances, up to 100 μm long, 6-12 μm wide at the top. Spores truncate to oblong ellipsoid, 10-12 × 7-8 μm, yellow and finely asperulate. Only the type specimen has been seen.

The species should be rather easy to separate from the *G. lucidum*-complex by its irregular club-shaped hyphal endings in the pilear crust and the distinctly oblong spores. When more of the many old Ganodermas have been examined properly, it may well be that there is a prior name for the taxon described here.

Poria borbonica, JB 4:198, 1890.
"Ile de Reunion."
= *Tinctoporellus epimiltinus* (Berk. & Br.) Ryv.
H. boueana, BSMF 23:80, 1907.
"Guinée Française, M. Boué, 1905-1906."
= *Hexagonia variegata* Berk.
Fun. bouei, BSMF 23:81, 1907.
"Guinée Française, 1905. M. Boué."
= *Trichaptum byssogenus* (Jungh.) Ryv.
I. brevidens Pat. in Pat. & Lagerheim, BHB 3:59, 1895. FIG. 1 F, G.

≡ *Coriolus brevidens* (Pat.) Pat., Essai tax. p. 94. 1900.
"Pululahua, Equateur, leg. Lagerheim."
≡ ***Hyphodontia brevidens*** (Pat.) Ryv., *comb. nov.* Basionym: *Irpex brevidens* Pat., BHB 3:55, 1895.

Fruitbody effused, resupinate, floccose and loose of consistency, hymenium dentate and odontioid, aculei less than 1 mm long, white to ochraceous, generative hyphae with slightly thickened walls and with clamps, 2.5-4 μm wide, tubular, thick-walled cystidia present in the aculei, scarcely projecting, 60-250 × 6-8 μm. Basidia clavate with 4 sterigmata, 12-18 × 4-5 μ, spores subglobose, smooth, hyaline and thin-walled 3-5.5 × 3.5-4 μm.

The species reminds one of a minute form of *H. barba-jovis* (Fr.) Erikss., which, however, has much longer aculei, larger spores and a more dense and tough consistency.

Mel. brevipes Pat. in Heim, BSMF 43:25, 1927.
Type specimen not found.
P. brunneogriseus Pat. & Gail., BSMF 4:34, 1888.
Type specimen not found.
X. bryophilus, BMP 30:410, 1924.
"Environs de Maramaidia (Madagascar), 28/2-1923."
= *Coltriciella dependens* (Berk. & Curt.) Murr.
G. buissonii, BSMF 40:164, 1924.
"A terre prés Elisabethville, Haut Katange, Congo Belge [Zaire], mars 1923. M. Boussa."
= *Ganoderma ochrolaccatus* (Mont.) Pat.
D. burserae, JB 3:342, 1889.
"Sur le bois pourri d'un *Bursera gemmifera* (Martinique)."
= *Fuscocerrena portoricensis* (Fr.) Ryv.
P. caesioflavus Pat. in Pat. & Lagerheim, BSMF 8:114, 1892. FIG. 2C.
"Pallatanga, Equateur."
≡ ***Tyromyces caesioflavus*** (Pat.) Ryv., *comb. nov.* Basionym: *Polyporus caesioflavus* Pat., BSMF 8:114, 1892.

Fruitbody annual, pileate, applanate, semicircular, 3 cm long, 1.5 cm wide, 3 mm thick, rather fragile when dry. Pileus pale yellow, dull, azonate, finely wrinkled (lens) with an agglutinated layer of hyphae. Pore surface cream, pores angular to round, 7-9 per mm, tubes cream, up to 2 mm deep. Context cream 1-2 mm thick, soft. Hyphal system monomitic, generative hyphae with clamps, 2-4 (rarely 5) μm wide. Cystidia not seen. Spores allantoid, hyaline, non-amyloid, 3-4.5 × 1-1.5 μm.

This species is rather close to *T. caesius*, but has a more yellowish tint all over, and not grey as in *T. caesius*. It may be that when the spores are tested in fresh specimens, they will be weakly amyloid as in *T. caesius*.

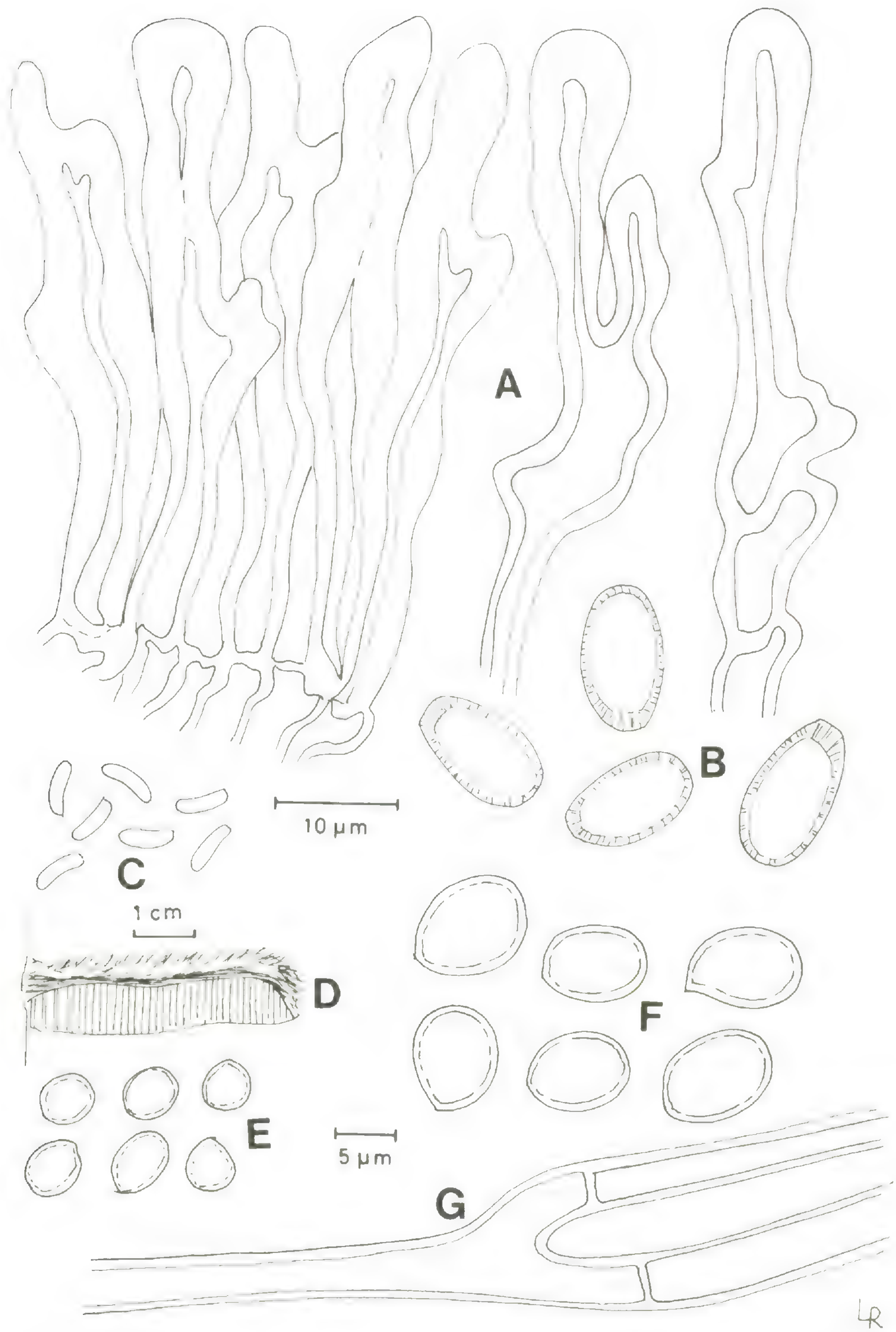

FIG. 2. *Ganoderma boninense* A) hyphal elements from the pileus cuticle, B) spores. *Tyromyces caesioflavus* C), spores. *Spongipellis caseosus* D) fruitbody, E) spores. *Coltricia duportii* F) spores, G) hypha. From the type specimens.

There is also a description in Carranza (1982) based on a fresh specimen from Costa Rica. The above description is based on the type which apparently is slightly more yellowish on the pileus than seen in fresh specimens. Carranza (op.cit.) made a combination in *Tyromyces*, but it is invalid since she did not give a reference to the place of publication for the basionym. This is strictly indicated to be necessary for a valid combination according to the Code of Botanical Nomenclature (Art. 33).

P. calyculus Pat. & Gail., BSMF 4:32, 1888.
"San Fernando de Atabyo. 7 fev. 1887. [Venezuela]."
= *Polyporus leprieurii* Mont.

Porog. camptogramma, BSMF 29:208, 1913.
"Sur bambou, Hanoi [Viet Nam], fev. 1911, Duport 203."
= *Grammothele fuligo* (Berk. & Br.) Ryv.

P. canaliculatus, BSMF 14:153, 1898.
"Java, Zollinger."
= *Rigidoporus fusco-lineatus* (Pers.) Ryv.

F. caperatus, BSMF 18:171, 1902.
"Guadeloupe, M. Hirondelle, Leg. Duss."
= *Phylloporus* sp.? The specimen represents a poroid agaric.

H. capillacea Pat. & Gail., BSMF 4:36, 1888.
"San Fernando de Atabayo. Leg. Gaillard, [Venezuela], 1887."
Accepted species in *Hexagonia*, for a description, see Fidalgo (1968:57-59).

G. carnosum, BSMF 5:66, 1889.
"Forêt de Gouizy, 18 aout 1881, Eaux-Bonnes reg. Pyrenaica (France), E. Doassans 11939."
= *Ganoderma lucidum* (Fr.) Karst. s. lat.

Since the examination of the type specimen, *Ganoderma atkinsonii* Jahn, Kotl. & Pouz. has been described as new (Jahn, Kotl. & Pouz. 1980). This is a species very close to *G. lucidum* and occurring in central Europe, mostly on *Abies*. Since *G. carnosum* was reported from *Abies*, it may represent an earlier name for *G. atkinsonii* especially since the spores of *G. atkinsonii* are reported as slightly larger than for *G. lucidum*. This was also the fact for *G. carnosum*: "les spores sont en peu plus grandes et plus verruqueses que celle de *G. lucidum*."

Lep. caseosus, AM 5:365, 1907. FIG. 2 D,E.
"Prov. São Paulo, Campinas, [Brazil], 3. 1897, leg. F. Noack."
≡ ***Spongipellis caseosus*** (Pat.) Ryv., *comb. nov.* Basionym: *Leptoporus caseosus* Pat., AM 5:365, 1907.

Fruitbody annual, pileate, applanate and broadly attached, in the type specimen about 7 cm long, 5 cm wide and 1.5 cm thick, fragile when dry,

said to be cheese-like when fresh. Pileus ochraceous, finely velutinate and radially folded, dull and azonate. Pore surface ochraceous, probably white when fresh, pores angular and dentate, 2-4 per mm, tubes up to 10 mm deep, straw-colored in the outer part, cream in the inner parts, context up to 5 mm thick, duplex, lower part fibrous in radial direction, cream, upper part looser and slightly darker than the lower part.

Hyphal system monomitic, generative hyphae with clamps, 2-6 μm wide, thick-walled in the trama, more thin-walled in the subhymenium and upper part of context. Cystidia not seen. Spores subglobose, thick-walled, smooth and non-amyloid, 3.5-4.5 × 4-5 μm.

The species is separated from the other *Spongipellis* species by its smaller pores and spores.

H. casuarinae, BJJ 1:263, 1901.
"Nouvelle Calédonie. Tres voisin *H. pulchella* Lév."
= *Hexagonia tenuis* (Hook.) Fr.

Leucop. chaetoloma, BSMF 38:86, 1922.
"Reserve forestier de Komp. Chli, juillet 1921, Cambodge."
= *Polyporus tricholoma* Mont.

Ph. chaetoloma, BSMF 38:86, 1922.
"Bot. Gard. Singapore, Oct. 1917. Leg. Baker."
= *Phellinus contiguus* (Fr.) Pat.

G. chaffangeonii, BSMF 5:74, 1889.
"Chaffangeon 1889, Haut Orénoque [Venezuela]."
= *Ganoderma resinaceum* Boud.
For a critical description of this species and its tropical varieties, see Steyaert (1972:95).

Ganoderma chaperi, JB 4:197, 1890.
"Typus, Cuba, M. Chaper."
= *Amauroderma praetervisum* (Pat.) Torr. as already indicated by Furtado (1981:65).

H. chartacea Pat. & Har., BSMF 9:209, 1893.
"Loango, Congo [Zaire], leg. Dybowski 1848."
= *Hexagonia speciosa* Fr.

C. chudaei, BSMF 23:83, 1907.
"M. Chudeau, Koulikor 1906 [Guinea]."
= *Coriolopsis floccosa* (Jungh.) Ryv.

T. chusqueae Pat. in Pat. & Lagerheim, BHB 3:54, 1895.
"San Jorge, Equateur, Lagerheim, juillet 1892."
= a corticioid species with a folded hymenium, and of unknown identity. Not a member of the Polyporaceae.

P. carneopallens var. *cinerea*, JB 3:342, 1889.

"No. 12 Duss, Reçu 29 aout 1889, Martinique."
≡ *Grammothele lineata* Berk. & Curt.

H. concinna Pat. & Har., BSMF 9:209, 1893.
"Congo, Leg. Dybowski."
= *Hexagonia tenuis* (Hook.) Fr.

T. cornea, JB 4:16, 1890.
"Tonkin [Viet Nam], Mt. Bavi, 9 mai 1888, leg. Balansa."
= *Cerrena meyenii* (Kl.) Hansen.

P. cotoneus Pat. & Har., BSMF 9:208, 1893.
"Congo [Zaire]. M. Dybowski."
≡ *Trametes cotonea* (Pat. & Har.) Ryv. For a description, see Ryvarden & Johansen (1980:562).

Poria crocata, JB 8:220, 1894.
"El Feidja, Tunisie, sur Quercus murbeckii, janvier 1893."
≡ ***Rigidoporus crocatus*** (Pat.) Ryv., *comb. nov.* Basionym: *Poria crocata* Pat., JB 8:220, 1894. For a description, (sub. *Poria nigrescens*) see Lowe, 1966.

Even though the type is sterile, the hyphal structure is so distinct with wide (3-8 μm in diameter) simple septate hyphae, moreover the small pores and the hard consistency make the species distinct.

P. croceoleucus, BMP 30:408, 1924.
Type specimen not found.

L. cyclogramma, BSMF 23:73, 1907.
"sur un Cocotier mort (aff. *L. berkeleyi*), Tonkin [Viet Nam]."
= *Lenzites betulina* (Fr.) Fr.

T. cyclophaea, BSMF 22:195, 1906.
"Oridtar, Mission Gautier, [Algerie], leg. Battander, sur un Gommier, X. 1905."
= *Trametes cingulata* Berk.

Lep. decaryi, BMP 30:409, 1924.
"Ankaizniana [Madagascar], alt. 1200-1500 m., avril 1923."
= *Tyromyces gratus* (Berk.) Ryv. For a description, see Ryvarden (1977:22).

This is the first time this small, pendant species has been reported from Africa.

T. decaryi, BMP 27:376, 1921.
"Madagascar."
= *Trametes socotrana* Cooke.

C. decorsei Har. & Pat., BMP 15:90, 1909.
"Baguirmi, 11855 [Congo]."
= *Trametes cingulata* Berk.

T. decussata, BSMF 22:49, 1906.

"Cariya Kiote, Hao, sur le Cocotier, decembre 1904 [Tahiti]."

= Accepted species in *Trametes*.

Fruitbody pileate, applanate, dimidiate and semicircular, up to 7 cm thick at the base and 10 cm in radius from the contracted base, woody hard when dry. Pileus dull, finely adpressed velutinate, zonate and sulcate, cream to ochraceous with shades of grey, radially wrinkled, with renewed growth, spreading from the base as irregular ochraceous patches and spots. Margin rounded. Pore surface cork-colored to ochraceous, pores 4-5 per mm, in parts somewhat irregular and sinuous, and then 1-2 mm long. Tubes ochraceous, up to 15 mm deep. Context up to 5 cm thick at the base, dense and ochraceous.

Hyphal system trimitic, generative hyphae with clamps, 2-4 µm wide, skeletal hyphae dominating, straight and thick-walled, hyaline, 3-5 µm wide, binding hyphae common in the context, 2-4 µm wide in the stems. Spores not seen.

The species may remind one of a poroid specimen of *Lenzites elegans*, with its slightly irregular pores, especially in the central parts of the fruitbody. However, its pores are small, just visible to the naked eye, and its consistent ochraceous to pale brown color makes it much darker than normal in *L. elegans*. Further, its dull surface with more adpressed velutinate cover also is different from *L. elegans* which normally is smooth and semiglossy. The surface is also much more wrinkled than seen in *L. elegans*.

T. decussata belongs in the vicinity of *T. incana* Lév. which has much larger pores. *T. avellanea* Bres. has a much more reddish brown color throughout the fruitbody, and its pores are much smaller.

Fertile specimens of species in this group are highly desirable to settle some of the difficult taxonomic questions in this group of species.

P. depauperatus, JB 3:166, 1889.

"Puerto Cerico, 20 mai 1883. [Venezuela]."

The type is in bad shape; pores are almost lacking, probably they have been eaten by insects. The fruitbody is sterile, pileate with a 2-4 mm wide pileus, greyish white, adpressed tomentose in strong sulcate bands. Pore surface cream, pores 7-8 per mm, context white and soft, 1-2 mm thick.

Hyphal system dimitic, skeletal hypae 2-4 µm wide, finely encrusted in the pore mouths, generative hyphae 1.5-3 µm with clamps. No hymenium seen.

It may be that the collection represents *Incrustoporia nivea* (Jungh.) Ryv., but the whole fruitbody is softer than in that species. Furthermore, the sulcate pileus is rather untypical of *I. nivea*. For the time being the name should be dropped from consideration.

P. delavayi, JB 3:257, 1889.
"Abbé Delavay, 16 avril 1888, Yun-Nan [China]."
= *Perenniporia detritus* (Berk.) Ryv.
P. depressus Pat. & Gail., BSMF 4:129, 1888.
"San Fernando de Atabayo, Feb. 1887 [Venezuela]."
= *Microporellus dealbatus* (Berk. & Curt.) Murr.
Leucop. dictyoporus, BSMF 24:3, 1908.
"Ravine Soufflée, Guadeloupe."
= *Poromycena* sp.? It belongs in the Agaricaceae and not in the Polyporaceae. The spores are 3-4 × 2.5-3 µm and finely asperulate.
Leucop. discifer, AJB suppl. 1:111, 1897.
"Forêt de Tjibodas, Java, janvier, 1897. Leg. Maissart."
= *Microporellus obovatus* (Jungh.) Ryv.
H. discopodea Pat. & Har., BSMF 9:209, 1893.
"Congo, Leg. Chollon."
= *Hexagonia tenuis* (Hook.) Fr.
Porog. duporti, BSMF 29:208, 1913.
"Duport, 254, Hanoi [Viet Nam], 1912."
= *Grammothele lineata* Berk. & Curt.
X. duporti, BSMF 28:34, 1912. FIG. 2 F, G.
"Camayene, Guinée Française, M. Duport 1910, sur tronc de Palmier."
≡ ***Coltricia duporti*** (Pat.) Ryv., *comb. nov.* Basionym: *Xanthochrous duporti* Pat., BSMF 28:34, 1912.

Fruitbody laterally to almost centrally stipitate, pileus circular to flabelliform, up to 2.5 cm in diameter and 1 cm thick, surface dull, azonate, adpressed velutinate, rusty to deep cinnamon brown. Pore surface dark rusty brown, pores angular, 2-3 per mm, tubes rusty brown, up to 5 mm deep. Context rusty brown, rather fragile.

Hyphal system monomitic, generative hyphae thick-walled, brown and with simple septa, 3-7 µm wide. Setae not seen. Spores rusty brown, thick-walled and smooth, ellipsoid, 8-10 × 6-7 µm.

The species reminds one strongly of a small specimen of *C. sideroides* (Lév.) Teng from Southeast Asia, which, however, has globose spores, 6-9 µm in diameter.

Lep. duracinus, BSMF 18:174, 1902.
"Sur branches *Cercopia peltata*, Bois de Grand Etang, Guadeloupe."
≡ *Tyromyces duracinus* (Pat.) Murr.

There is a good description in Lowe (1975:53). The species is very close to *P. versicutis* Berk. and Curt. described from Cuba, the type of which, however, is sterile. More fertile collections are necessary to settle the relationship between these two species.

G. dussii, BSMF 15:198, 1899.

"Guadeloupe, leg. Duss 887, reçu 25 juillet 1898."

= *Ganoderma* species in the *G. lucidum*-complex.

The type is unfortunately sterile. In Duss 134, the spores are 8-10.5 × 6-8.5 which is within the range of *G. lucidum*. The hyphal elements on the pileus are clavate and of the same size and shape as in *G. lucidum*.

Myriadoporus dussii, BSMF 5:84, 1889.

"Martinique, leg. Duss. no. 17, reçu le 22 avril 1889."

= *Fomes fasciatus* (Fr.) Cooke.

Poria dussii, BSMF 15:199, 1899.

"Sur l'ecroce des branches pourres d'un *Inga lamifolia*. Environs de Bagatelle, Guadeloupe, 28 mars 1898."

= *Porogramme albocincta* (Cooke & Massee) Lowe.

H. dybowskii, BSMF 8:54, 1892.

"Brazzaville [Zaire], juillet 1891, leg. Dybowski."

= *Coriolopsis telfarii* (Kl.) Ryv.

P. dybowskii, BSMF 8:53, 1892.

"Sur bois mort, Brazzaville [Zaire], juillet, M.J. Dybowski."

= *Funalia leonina* (Kl.) Pat. The specimen is badly discolored.

F. eberhardtii, BSMF 23:77, 1907.

"Tonkin, Vallée de Djirin [Viet Nam]. Eberhardt LBA 248."

= *Elmerina cladophora* (Berk.) Bres.

S. eberhardtii, BSMF 36:176, 1920. FIG. 3 A, B.

"Annam, Llang Bian [Viet Nam], Eberhardt 196."

≡ ***Tyromyces eberhardtii*** (Pat). Ryv., *comb.nov*. Basionym: *Spongipellis eberhardtii*, BSMF 36:176, 1920.

Fruitbody applanate, pileate, dimidiate with a contracted base, in the type 10 cm wide at the margin, about 4 cm at the base, up to 6 mm thick in central parts close to the base, dense and hard when dry. Pileus finely tomentose, grey, slightly zonate and in parts with tufts of raised hyphae. Pore surface dirty brown, pores angular, 3-4 per mm, tubes resinous, brown and dense, up to 1.5 mm deep. Context pale brown, dense, 1-1.5 mm thick and with a black zone or band below the tomentum.

Hyphal system monomitic with agglutinated generative hyphae of variable width, 2-10 μm wide and with large clamps. Cystidia not seen. Spores globose, smooth, thin-walled and non-amyloid, 7-8 × 6-7 μm. On *Pinus* according to the label.

The species should not be retained in *Spongipellis* as this genus is characterized by a thick and duplex tomentum and thick-walled cyanophilous spores. The dense and thin context with a black zone below the tomentum is a distinct character for *T. eberhardtii*, which, together with the relatively

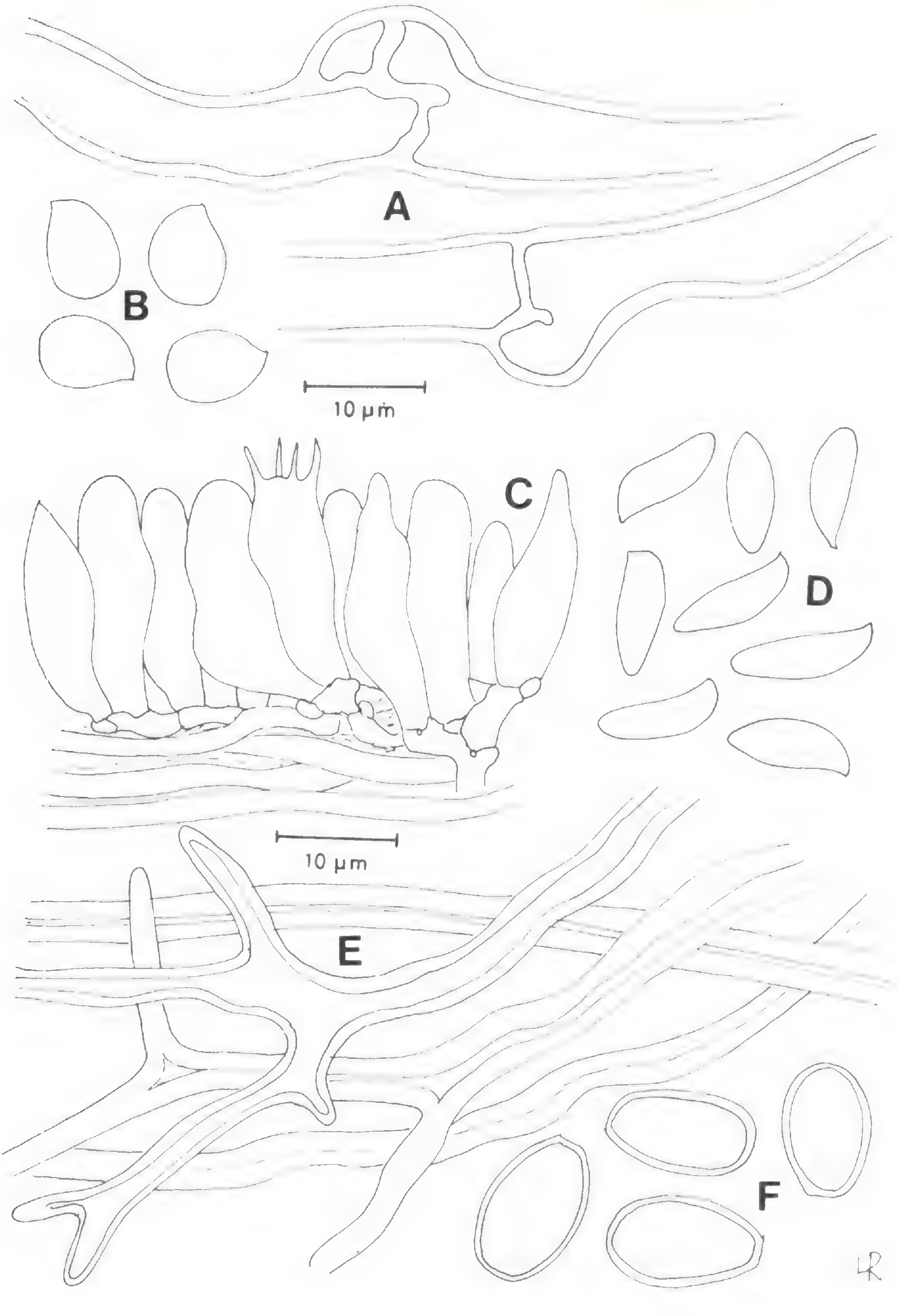

FIG. 3. *Tyromyces eberhardtii* A) hyphae, B) spores. *Antrodia eutelea* C) part of the hymenium, D) spores. *Perenniporia isabellina* E) skeletal hyphae, F) spores. From the type specimens.

large spores and the host, should make it easy to recognize. Fresh specimens are very desirable.

T. emarginata Pat. & Har., BSMF 9:208, 1893.
"Congo, leg. Dybowski, 1893."
= *Trametes socotrana* Cooke.

L. endophaea, JB 3:165, 1889.
"Trinidad, mai 1888, leg. L. Savoye."
= *Gloeophyllum mexicanum* (Mont.) Ryv. (Syn. *G. berkeleyii* (Sacc.) Murr.).

P. euphoriae, BHB 1:300, 1893.
"Sur le pied de l'*Euphora longana* dans le forêt de Bai Thon. [Viet Nam], Bon no. 1575, 14 juin 1892."
= *Aurificaria euphoriae* (Pat.) Ryv., *comb. nov.* Basionym: *Polyporus euphoriae* Pat., BHB 1:300, 1893.

The species is the same as *Polyporus indicus* Mass. 1910, which is the type species of *Aurificaria*. For a description of this species, see Ryvarden & Johansen (1980:100).

T. eutelea Har. & Pat., BSMF 28:144, 1912. FIG. 3 C, D.
"Sur *Tamarix*, Otar [Adrai] Mauritania, M. Chudeau."
≡ ***Antrodia eutelea*** (Har. & Pat.) Ryv., *comb. nov.* Basionym: *Trametes eutelea* Har. & Pat., BSMF 28:144, 1912.

Fruitbody resupinate, adnate and tough, 3 × 2 cm in the type, up to 7 mm thick. Margin ochraceous, finely floccose, pore surface pale tan, pores round, 4-5 per mm, context 1 mm thick, cream.

Hypal system dimitic, generative hyphae with clamps, 2-4 µm wide, skeletal hyphae solid to thick-walled, 3-6 µm wide, slightly dextrinoid in masses, cystidioles thin-walled, ventricose to clavate, 10-16 × 4-6 µm. Spores fusoid to cylindrical, 7-8 × 3-4 µm, thin-walled and non-amyloid. Known on *Tamarix* on the type locality.

Lowe (1966) reports this species as a synonym to *A. serialis* (Fr.) Donk. The two species are undoubtedly related having almost the same kind of spores, but the pores of *A. eutelea* are smaller than those of *A. serialis*, which is only known from gymnosperms as far as I am aware. The dextrinoid reaction reported from the skeletal hyphae of *A. eutelea* is rather weak, but may prove to be an important character when fresh material has been examined.

X. fasciatus Har. & Pat., BMP 20:153, 1914.
"Annam [Viet Nam], M. Eberhardt, 1913."
= *Coltricia sideroides* (Lév.) Teng.

G. fasciculatum, BSMF 11:86, 1895.

"Congo, leg. Dybowski, 1893, *Ganoderma dybowski* Pat."

= *Ganoderma* sp. of the *G. lucidum* complex. The type is sterile.

P. favoloides Doas. & Pat., BSMF 27:355, 1880.

"Ledonem-Salinarium, Jura, France."

= *Polyporus mori* Fr.

G. fici, Expl. Sci. Tunisie 4:4, 1892.

"A la base de vieux tronc de *Ficus*. Oasis de Gafsa. Tunisie, 21 mars 1871."

= *Ganoderma lucidum* s. lato. The spores are 10-12 × 7-9 μm, and the structure of the pileus crust is of the same type as in *G. lucidum*.

G. flexipes, BSMF 23:75, 1907.

"Tonkin [Viet Nam], Eberhardt LBA 101."

= Accepted species in *Ganoderma*.

Fruitbody stipitate, pileus small, laterally attached, about 1 cm wide and long, laccate, shiny, reddish brown, stipe approximately 25 cm long and 3 mm in diameter, glossy and black, homogeneous in section with a dense cream core. Pore surface brown, pores round 6-7 per mm, tubes 4 mm deep. Context cinnamon, 1-2 mm thick. Spores truncate 9-11 × 6-7.5 μm. The pileus cuticle consists of a dense palisade of clavate hyphal elements.

The species belongs in the *G. lucidum* complex since the spores and the pilear crust are within the normal range for *G. lucidum*. However, the long and thin stipe with the small pileus may prove to be diagnostic characters.

El. foliacea, PSSC 10:93, 1915.

"Mt. Maquiling, near Los Baños. P. I. [Philippine Islands]. Jan. 31/14. Elmer 2742."

= Belongs in the Agaricaceae, *Phylloporus* sp.?

G. frondosum Pat. in Heim, BSMF 42:292, 1927.

Type specimen not found.

Leucop. fulvipes, BMP 27:375, 1921.

"Andratambe, Madagascar, M. Decary, oct. 1921."

= *Amauroderma* cfr. *expallens* (Bres.) Furt. The type specimen is sterile.

Poria fulvobadia, JB 11:340, 1897.

"Huii Le [Thanh Hoa], [Viet Nam], 20 avril 1892. Leg. Bon 5294."

Selected as lectotype.

= *Rigidoporus vinctus* (Berk.) Ryv. Indicated already by Lowe (1966:24).

Poria fumosa Bres. & Pat., Lloyd Mycol. Writ. 1:49, 1901.

"Samoa, Lloyd 5042."

= *Rigidoporus vinctus* (Berk.) Ryv.

P. fuscocinereus, BSMF 8:113, 1892.

The type specimen has not been found.

P. fuscomaculatus Bres. & Pat., Lloyd Mycol. Writ. 1:49, 1901.
"Samoa Island, leg. C.G. Lloyd."
= *Polyporus udus* Jungh.

X. fuscovelutinus, BSMF 24:6, 1908.
"St. Martinsville, La. 29/9/1897 [U.S.A.]. Leg. A.B. Langlois."
= *Inonotus cuticularis* (Fr.) Karst.

Poria glauca, JB 5:312, 1891.
"Sur ecorces pourrier, sur vielles tiges de Bamboue, Tonkin [Viet Nam], Bon 3964."
= *Grammothele fuligo* (Berk. & Br.) Ryv.

T. grisea, JB 11:341, 1897.
"Trone porris, Dinh Huong, Thanh Hoa [Viet Nam], Bon 5896, 21 fevrier 1893."
= *Trametes menziesii* (Berk.) Ryv.

G. guadeloupense, BSMF 15:198, 1899.
"Camp Jacob, Guadeloupe, Duss 111."
= *Amauroderma rude* (Berk.) Torr.

P. gualeaensis Pat. in Pat. & Lagerheim, BSMF 9:129, 1893.
"Gualea Prov. de Pichincha, Equateur, jan. 1892."
= *Microporellus obovatus* (Jungh.) Ryv., a very young, almost steroid specimen.

Poria hanoiensis, JB 11:341, 1897.
"Vieux bois sec, Ha Noi [Viet Nam], 24 oct. 1891. Bon 4990."
= *Perenniporia tephroporus* (Mont.) Ryv.

P. helopus Pat. in Pat. & Har., BSMF 20:63, 1904.
"Debris bondant une allee dans les piperiner du Museum, France, oct. 1901."
= *Polyporus tuberaster* Fr.

H. heterospora, JB 3:166, 1889.
"Sur tronc pourri, Puerto Zamuro [Venezuela], Gaillard 278, avril 1887."
= *Megasporoporia cavernulosa* (Berk.) Ryv.
For a description, see Ryvarden, Wright & Rahjnberg (1982).

Leucop. hirtolineatus, AJB suppl. 1:111, 1897.
"Java, Jard. Bot. Buitenzorg [Indonesia]. Fev. 1894, leg. Massart 348."
= *P. philippinensis* Berk.

X. igniarioides, BSMF 14:54, 1898.
"Tetlama de l'Cuernaica Cuernavaca, Mexique, Octobre 1, 1890. no. 5432."
= *Phellinus rimosus* (Berk.) Pil.

G. insulare Har. & Pat., JB 17:11, 1903.
"Ile de Pins, [Tahiti]."
≡ *Amauroderma insulare* (Har. & Pat.) Torrend.
For a modern description, see Furtado (1981:52).

G. intermedium Bres. & Pat. in Pat., BSMF 3:76, 1889.

"Bresil, ex herb. Berolinensis."

≡ *Amauroderma rude* var. *intermedium* Furt. teste Furtado (1981:75).

The neotropical collections of *A. rude* are all slightly darker and have somewhat smaller pores than those from the paleotropics. Since their microscopical characters are identical, I follow Furtado in his interpretation. Cultural studies may prove that the neotropical taxon should be given rank as a species, and *G. intermedium* will then be the valid basionym.

Phaeolus iobaphus, BSMF 22:85, 1922.

"Botanic Gardens, Singapore, Baker 1917."

≡ ***Wrightoporia iobaphus*** (Pat.) Ryv., *comb. nov.* Basionym: *Phaeolus iobaphus* Pat., BSMF 22:85, 1922.

Fruitbody resupinate, easily detached, probably soft when fresh, hard and somewhat shrunken when dry, pore surface violet-pinkish, brown when dry, pores irregular, angular, up to 0.5 mm wide when fresh, 3-4 per mm when dry and apparently shrunken or partly collapsed, tubes up to 8 mm deep. Subiculum violet when fresh, brown when dry. Margin floccose and soft, pale pinkish when fresh, pale brown when dry.

Hyphal system dimitic, generative hyphae with clamps, 2-3 μm wide, skeletal hyphae dextrinoid, thick-walled, sinuous and unbranched, 3-5 μm wide. Spores subglobose, 3-4.5 × 3-4 μm, amyloid, finely asperulate.

Known only from the type locality. The species should be easy to recognize because of the pinkish-violet colors in fresh condition and the rather large and irregular pores. Its closest relative is undoubtedly *W. cinnamomea* Ryv. (Ryvarden 1982:146) but this species has much smaller pores, an ochraceous pore surface and cinnamon context.

D. iocephala, BMP 30:409, 1924.

"Maromandia, Madagascar, 31.3.1923."

= *Cystostiptoporus violaceo-cinerascens* (Petch) Ryv.

This is the first time this Asian species is reported from Africa. The African specimens were typical with dextrinoid skeletal hyphae and strongly ventricose, apically encrusted cystidia.

T. iodes, BSMF 30:341, 1914.

"Maromandia, Madagascar, no. 1750."

= *Trichaptum byssogenus* (Jungh.) Ryv.

P. irinus Pat. & Gail., BSMF 4:31, 1888.

Type specimen not found.

P. isabellinus Pat. & Gail., BSMF 4:35, 1888. FIG. 3 E, F.

"Sur branches pourries, Puerto Zamuro [Venezuela], 30 mai 1887, no. 43."

Invalid name, not *P. isabellinus* Fr. 1828. However, the epithet was validated as *Poria isabellina* Pat. ex Sacc.

≡ ***Perenniporia isabellina*** (Pat. ex Sacc.) Ryv., *comb. nov.* Basionym: *Poria isabellina* Pat. ex Sacc., Syll. Fung. 9:192, 1891.

Fruitbody resupinate, effused, up to 3 mm deep, coriaceous to woody hard, margin thin, finely ochraceous, pore surface pale cocoa brown to buff, pores angular 4-5 per mm, a few larger, partly split and sinuous, tubes concolorous with pore surface, up to 2 mm deep. Context very thin, ochraceous. Hyphal system dimitic, generative hyphae with clamps, 2-3 μm wide, skeletal hyphae arboriform with long unbranched lower part and moderately branched upper part, 2-5 μm wide, non-dextrinoid, spores oblong truncate, thick-walled, slightly dextrinoid, 11-13 × 7-8 μm.

The large spores, the moderately large pores and the resupinate fruitbody characterize this species.

P. javanicus, AJB suppl. 1:112, 1897.

"Forêt de Tjibodas, Massart, janv. 1897, no. 1617."

= *Coltricia* cfr. *sideroides* (Lév.) Teng. The type specimen is sterile.

X. javanicus, AJB suppl. 1:113, 1897.

"Java, Forêt de Tjibodas, leg. Massart no. 1451."

= *Coltricia montagnei* (Fr.) Murr.

Leucop. labiatus, Fl. Crypt. Aut. Fr. p. 25, 1903.

"Sur le bois pourrisant d'un *Simaranta amara*, Trois Riviers, Gaudeloupe, mars 1902. Duss."

= *Microporellus obovatus* (Jungh.) Ryv.

H. lachnochaeta, PSSC 10:93, 1915.

"M. Linay, Prov. Bataan, [Philippine Islands]. Baker 3547. June 12/13."

= *Daedalea imponens* Ces.

C. langbianensis Har. & Pat., BMP 20:152, 1914.

"Annam [Viet Nam], M. Eberhardt 1912."

= *Microporus vernicipes* (Berk.) Kunt.

Poria lateritia, BSMF 15:200, 1899.

"Sur un tronc d'un *Synplocas maritimiersii*, Camp Jacob, Guadeloupe, Duss 592."

≡ *Porogramme lateritia* (Pat.) Pat. Essai. tax. p. 64, 1900.

Fruitbody resupinate, adnate and hard, pore surface greyish with a reddish tint, irregular in the type and consisting of a pattern of thin ridges, angular-elongated and sinuous, probably old and collapsed, 12-15 pores per mm, tubes up to 2 mm deep, brick to orange red, very dense and in part filled with white mycelium, and without distinct zonation. Context dense, brick red, 0.1-0.7 mm thick. Substrate reddened in irregular zones below the fruitbody.

Hyphal system monomitic, generative hyphae with clamps, in the old tube walls thick-walled and agglutinated, but clamps rather easily seen, distinctly colored and brick red in masses, reddish yellow when seen separately, in the subhymenium delicately thin-walled, narrow 1.5-2.5 µm and agglutinated, apparently short-celled in the subhymenium. No basidia, cystidioles and spores seen. Known only from the type specimen.

Characteristic are the brick red, dense tubes up to 2 mm deep and the monomitic hyphal system. It would be valuable to have a fresh specimen to ascertain the outline of the hymenophore.

Mel. latiporus Pat. in Heim, ACE 1:270, 1928.

Type specimen not found.

Leucop. lepidus, BSMF 33:52, 1917.

"Sur un tronc renvenus, Hanoi, Jardin Botanique [Viet Nam], 12/9/1907."

= *Polyporus squamosus* Fr.

G. leucocreas Pat. & Har., BSMF 28:281, 1912.

"Loango [Zaire]."

= *Ganoderma lucidum* (Fr.) Karst. s. lato.

L. leveillei, Essai. tax. p. 89, 1900.

Nomen novum for *Polyporus lenziteus* Lév. which Patouillard assumed could not be combined in *Lenzites* without making a tautonym. This interpretation may be doubtful as the generic and the specific names are not exactly identical. *P. lenziteus* Lév. is a synonym for *L. acuta* Berk. as indicated by Ryvarden (1981:181).

P. leveillei, RM 13:137, 1891.

Nomen invalidum, not *P. leveillei* Cooke.

G. lignosum, BSMF 40:165, 1924.

"Victoria Falls, Haut Katanga, Congo Belge [Zaire]. Fevrier 1923. M. Buiosson."

This is an accepted species in *Ganoderma*, for a modern description, see Ryvarden & Johansen (1980:91) as *Ganoderma neurosporum* Furt. Steyaert (1972:104) commented upon the species and pointed to its somewhat deviating characters such as a very thin undifferentiated crust and a cream-colored dense context.

There is some confusion in the citation of the type locality. Victoria Falls are situated on the border between Zambia and Zimbabwe (previously N. and S. Rhodesia) and not in Zaire.

P. linguaformis, JB 4:18, 1890.

"Mt. Bavi, Tonkin [Viet Nam], leg. Balansa, mar. 1888."

= *Polyporus udus* Jungh.

P. lithphyllodes Har. & Pat., BMP 8:130, 1902.
"Japan."
= *Polyporus melanopus* Fr.?

The type is in a bad state after having been transported in some sort of chemical liquid from Japan and France. Today it is black, dense and resinous hard with somewhat paler pore surface. The fruitbody is pileate and with a lateral tapering base or stipe. The pileus is strongly lobed, incised and smooth.

The hyphal system is dimitic with clamped generative hyphae and arboriform binding hyphae. No hymenium was seen, spores ellipsoid, smooth and non-amyloid, 3-4.5 × 2.5-3 μm with an oil drop. They occurred in large numbers and probably belong to the species.

The hyphal structure places the species in *Polyporus* str., but fresh specimens are necessary to ascertain its true identity.

G. lloydii Pat. & Har., BSMF 28:281, 1912.
≡ *Humphreya lloydii* (Pat. & Har.) Stey.
For a detailed description, see Ryvarden & Johanson (1980:97).
X. ludovicianus, BSMF 24:6, 1908.
"Abita Springs, Louisiana. 4.7.1898."
≡ *Inonotus ludovicianus* (Pat.) Murr.
For a detailed description, see Pegler (1964:190).
X. macropus Pat. in Heim, BSMF 42:294, 1927.
"Dans le haute Apure, [Venezuela], 1926, M. Gunod 238."
= *Coltricia spathulata* (Hook.) Murr.
Bresadolia mangifera, Fl. Crypt. Aut. Fr. p. 36, 1903.
"Guadeloupe, Duss 410."
Badly eaten by insect and no hymenophere present.
Mel. marasmioides, BSMF 18:173, 1902.
"Fondo, St. Denis, Martinique, aout 1907, Duss leg."
= *Polyporus guyanensis* Mont.
L. marginata, BSMF 3:169, 1887.
"Nouvelle Calédonie."
= *Gloeophyllum striatum* (Fr.) Murr.
X. melanocephalus Har. & Pat., BMP 8:131, 1902.
"Ad terram, Tokyo, [Japan], leg. Harmand."
= *P. lithophyllodes* Har. & Pat.

The identity was suggested by Bresadola on a small note attached to the type. Also the type of *X. melanocephalus* has been preserved in some sort of chemical liquid which strongly has affected the color and consistency of the fruitbody. However, the stipe has a fine adpressed layer of dark brown

binding hyphae and this clearly suggests that the species belongs in the complex around *P. melanopus* Fr.

X. melanodermus, AJB suppl. 1:113, 1897.
"Java, Forêt de Tjibodas, leg. Massart no. 1350."
≡ *Phellinus melanodermus* (Pat.) Fidalgo.
For a description, see Ryvarden & Johansen (1980:185).

G. mexicanum, BSMF 14:54, 1898.
"Tepalcingo, D. de Jonacatepec, [Mexico], oct. 22. 1890."
= *Ganoderma lucidum* (Fr.) Karst. s. lato.

Lep. mexicanus, BSMF 14:55, 1898.
"Entre Uruapau y Caratacua dec. 21. 1890."
= *Tyromyces* sp., old, badly weathered and sterile specimen.

Ph. microcystideus Har. & Pat., BMP 15:90, 1909.
"Chevalier, Congo, [Zaire]."
= *Phellinus linteus* (Berk. & Curt.) Teng.

F. minutus, RM 13:137, 1981.
"Annam [Viet Nam], Nha trang a Ninh hoa. 27.10.1923. Poilane 8438."
= *Favolus spathulatus* (Jungh.) Lév. Very small specimens.

Microporus mollis, BSMF 25:4, 1909.
"Sur bois mort. Tonkin [Viet Nam], Forêt de Djirin L.B.A. 247."
= *Polyporus badius* (S.F. Gray) Schw.

P. mollissimus, JB 11:340, 1897.
"Sur vieux tronc d'*Euphora longana*. Lang Nhoi, Tonkin [Viet Nam], 6 fevrier 1893, Bon 866."
≡ *Oxyporus mollissimus* (Pat.) Reid. For a detailed description, see Ryvarden & Johansen (1980:453).

P. multiceps, RM 13:137, 1891.
Type specimen not found.

Mel. multiplex Pat. in Heim, BSMF 43:27, 1927.
Type specimen not found.

P. mycenoides, BSMF 3:169, 1887.
"Nouvelle Calédonie, leg. Balansa."
= *Filoboletus manipularis* (Berk.) Singer, teste Singer (1945:215).

Lep. nauseosus, Fl. Crypt. Aut. Fr. p. 27, 1903.
"Au pied d'un *Coffea arabica*, Guadeloupe, Duss 121."
A badly developed specimen without a hymenophore. I doubt whether it represents a polypore, probably more a young corticioid species. The lower surface is today only a mass of resinous hyphae without a discernable structure. The name should be dropped as a *nomen dubium*.

G. neglectum, BSMF 3:169, 1887.
Type specimen not found.

As discussed by Steyaert (1980:184), the so-called "authentic" specimen in the Paris Museum cannot be accepted as the type. The main reason is that the spores described for the type specimen and in the Paris specimen are very different. Steyaert proposes the name as a *nomen dubium*, a conclusion to which I subscribe. The "authentic" specimen is of *Ganoderma lucidum* (Fr.) Karst. s. lato with spores 8-9 × 5.5-6.5 µm.

X. niaouli, BJJ 1:263, 1901.
"Sur *Melaleuca viridiflora*. Nouvelle Calédonie."
= *Phellinus rimosus* (Berk.) Pil.

Lep. nigrellus, Fl. Crypt. Aut. Fr. p. 28, 1903.
"Bois des Basse Terre, 1901, Guadeloupe, Duss."
= *Bjerkandera adusta* (Fr.) Karst.

H. nigrocincta, BSMF 22:48, 1906.
"Rikitea, Gambier [Gambia]."
= *Hexagonia niam-niamensis* Henn.

T. nitida, JB 4:17, 1890.
"Mont Bavi au Tonkin, decembre, B. Balansa no. 79."
= *Trametes scabrosa* (Pers.) Cunning.

T. nitidula, BSMF 23:82, 1907.
"Kornaka [Sudan], 27 mai 1906, M. Chudeau."
= *Trametes marianna* (Pers.) Ryv.

X. noacki, AM 5:366, 1907.
"Brésil, Araraquara, Prov. São Paulo. 11. 1896. Leg. F. Noack."
= *Phellinus rhytiphloeus* (Mont.) Ryv.

Mel. noackianus, AM 5:365, 1907.
"Cubatao, São Paulo, Brésil, leg. Noack no. 426."
= *Polyporus varius* Fr.

Ungulina obesa, BSMF 22:50, 1906.
"Sur le tronc de Cocotier, Apataki, [Tahiti], aout 04, leg. Seurat."
= Of unknown identity, sterile.

Fruitbody ungulate-spherical, about 10 cm wide and thick, woody hard. Pileus with a thin, partly wrinkled cuticle, as in a young specimen of *F. pinicola*, light yellow to pale reddish-brown, azonate, glabrous. Pore surface pale dirty-brown now, pores 6-7 per mm, angular, tubes cream-ochraceous, fragile, but hard, up to 6 mm deep. Context cream, homogeneous, very hard.

Hyphal system trimitic, generative hyphae with clamps, 2-4 µm wide, skeletal hyphae common, solid to very thick-walled, 3-6 µm wide, binding hyphae common, especially in the context 1-5 µm wide, distinctly tapering. No structure in the cuticle, only agglutinated horizontal hyphae, very thin, less than 0.1 mm in section, dark resinous yellow to brown. No spores or hymenium seen. Many mould spores present.

The specimen looks like a young *F. pinicola*, but pores are slightly smaller than in this species and there are no conifers in Apataki. A fertile collection is necessary to reveal its proper assignment. It may, of course, represent a young specimen of a *Ganoderma* species, but I do not know any species with an undifferentiated cuticle, a woody hard, cream context and such small pores.

G. obockense, BSMF 3:119, 1887.
"Tronc de Mimosa, Environs d'Obock [Somalia], leg. M. Farrot."
= *Ganoderma colossum* (Fr.) Murr.

H. obersa, RM 13:137, 1891.
"Fourta Djallon [Guinea]."
= *Hexagonia speciosa* Fr.

T. ochroleuca, BSMF 30:341, 1914.
"Fort Crampel, [Congo], 27 janvier 1913, no. 2131."
Invalid name, homonym of *T. ochroleuca* (Berk.) Bres. Renamed *T. patouillardii* Sacc. & Trott., Syll. Fung. 23: 438, 1925.
= *Trametes socotrana* Cooke.

X. opisthopus, BMP 29:336, 1923.
"Annam [Viet Nam], Hjaatrang, 4-3-1929, leg. Piolane."
= *Phellinus pullus* (Berk. & Mont.) Ryv.

P. orinocensis Pat. & Gail., BSMF 4:31, 1888.
"Puerto Zamuro [Venezuela], 28 mai 1887."
≡ *Pseudofavolus orinocensis* (Pat. & Gail.) Ryv. For a description, see Ryvarden & Johansen (1980:518).

G. oroleucum Pat. & Har., BSMF 22:118, 1906.
"Java, Serri = tropicum Jungh. [the latter with pencil]."
= *Ganoderma lucidum* (Fr.) Karst. s. lato.

G. ostracodes, BSMF 29:209, 1913. FIG. 4 A,B.
"La Pho, Tonkin [Viet Nam], Demange 328."

Fruitbody pileate, applanate and dimidiate with contracted base, about 11 cm long and 7 cm wide from the base to the margin, about 1.5 cm thick, dense and hard when dry. Pileus laccate, shiny, smooth and sulcate in wide slightly rounded zones, deep umber to blackish-brown at the base, lighter sienna brown at the peripheral part with a thin, ochraceous to yellow margin. Pore surface pale umber brown, pores about 6 per mm, round and entire, tubes up to 10 mm, pale brown. Context 2-5 mm thick, pale ochraceous to cream. Hyphal system dimitic (binding hyphae proper not seen), generative hyphae with clamps, hyaline 2-4 μm wide in the trama and context, skeletal hyphae dendroid to arboriform and moderately branched, pale yellow in the trama, hyaline in the context, 3-6 μm wide in the main stem which can be unbranched in long segments of at least 100 μm, moderately branched in the end. Crust about 100 μm thick of short-celled generative hyphae, thick-

walled and dark brown with thickened septa while the original clamps are very difficult to observe, hyphal ends as short clavate organs in a dense palisade, 20-40 µm long. Spores subglobose, 6.5-8 × 6-7 µm, pale yellow and finely asperulate.

The small subglobose spores and the pale context separate this species from *G. lucidum* s. lato. In the type also the clavate hyphal endings in the crust are generally shorter than those found in *G. lucidum* s. lato.

P. pachyphloeus, JB 3:257, 1889.
"Iles Fidji, M. Filhol 1875."
≡ *Phellinus pachyphloeus* (Pat.) Pat. For a detailed description, see Fidalgo (1968:121) or Ryvarden & Johansen (1980:192).

G. pallens, BSMF 39:52, 1923.
"Reserve forestier de Compong Chanang, Cambodge, Juillet 1921. M. Petelot."
= *Cystostiptoporus violaceo-cinerascens* (Petch) Ryv.

Mel. pancheri, BSMF 3:170, 1887.
"Bourail [New Caledonia], mars 1869. Leg. M. Balansa."
= *Polyporus dictyopus* Mont.

C. parthenius Har. & Pat., BMP 15:90, 1909.
"Gabon, Cheuranthie, 11478."
= *Trametes modesta* (Fr.) Ryv.

P. parviporus Pat. in Pat. & Gail., BSMF 4:28, 1888.
"San Fernando de Atabapo [Venezuela], fev. 1887. no. 217."
= *Microporellus dealbatus* (Berk. & Curt.) Murr.

T. patouillardii Sacc. & Trott.
See *T. ochroleuca* Pat.

X. pavonius Pat. in Heim, BSMF 42:293, 1927.
"Quashuakita, [Venezuela], 1 juillet 1926. M. Grusart 229."
= *Coltricia spathulata* (Hook.) Murr.

X. pendulus Har. & Pat., BMP 20:153, 1914.
"Annam [Viet Nam], 1912, leg. Eberhardt no. 13."
= *Inonotus* sp., immature, small, sterile and without setae, identity unknown.

L. pergamenea, BSMF 30:340, 1914.
"Afrique Central, Fort Crampel [Congo], fevrier 1913."
= *Lenzites elegans* (Fr.) Pat.

G. pernanum, BSMF 40:163, 1924.
"Maromandia, Madagascar, leg. R. Decary. 24.2.1923."
= *Haddowia longipes* (Lév.) Stey.

H. phaepora, BSMF 23:74, 1907.
"Nam Dinh, Tonkin [Viet Nam], L. Boutan no. 440, reç. 20 oct. 1904."
= *Hexagonia tenuis* (Hook.) Fr.

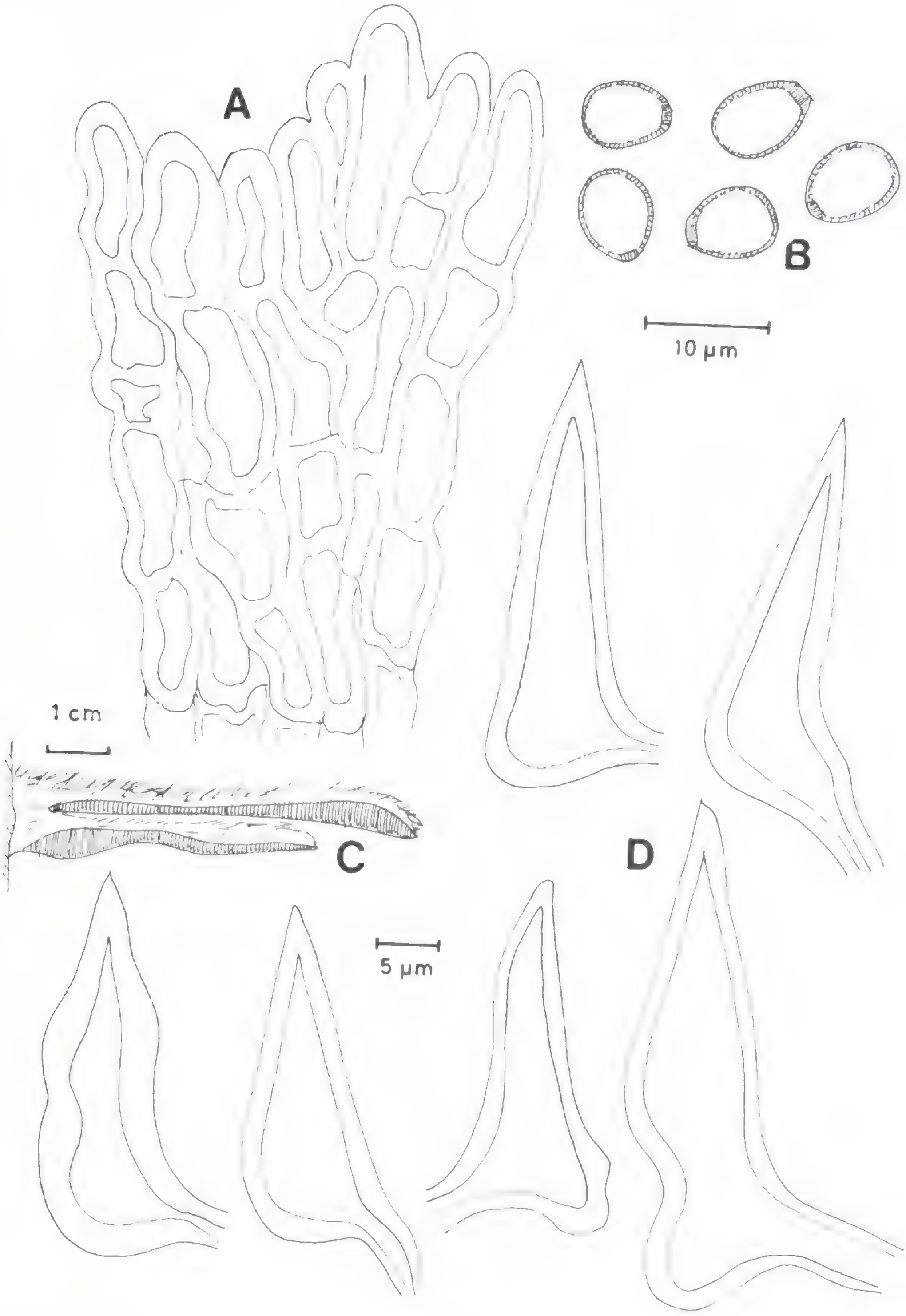

FIG. 4. *Ganoderma ostracodes* A) hyphal elements from the pileus cuticle, B) spores. *Inonotus pseudoradiatus* C) fruitbody, D) setae. From the type specimens.

D. philippinensis, PSSC 10:84, 1915.
"Mt. Maquiling, Prov. Laguna, Philippines, June 1/14. Baker 3394."
= *Diachantodes novo-guineensis* (Henn.) Fidalgo
F. pinihalepensis, Cat. pl. cell. Tunisie p. 49, 1897.
"Bou'Chebka, Tunise, jan. 1893, N. Patouillard, sur Pin."
= *Fomitopsis pinicola (Fr.) Karst.*
U. volvata var. *pleurostoma*, BSMF 23:74, 1907.
"Tonkin [Viet Nam], Sur le Pin, Eberhardt 133."
= *Cryptoporus volvatus* (Peck) Hubb.
Mel. poilanei Pat. in Heim, BSMF 43:28, 1927.
"Annam [Viet Nam], Lang Kohai pré Quang Tri. 10.6.1924. Poilaine no. 10759."
= *Polyporus virgatus* Berk. & Curt.
G. praetervisum, BSMF 5:78, 1889.
"*Polyporus auriscalpium* Pers. Weddel [Brazil]."
= *Amauroderma praetervisum* (Pat.) Torr. For a modern description, see Furtado, 1981:65.
X. princeps, BSMF 14:187, 1898.
"Java, leg. Clautriau."
= *Phellinus wahlbergii* (Fr.) Reid.
Leucop. prostratus, BSMF 23:73, 1907.
"Tonkin [Viet Nam], Eberhardt EBA 157."
= *Microporellus obovatus* (Jungh.) Ryv.
P. pseudoradiatus Pat. in Pat. & Lagerheim, BSMF 11:207, 1895.

FIG. 4 C. D.

"San Jorge, Equateur, leg. Lagerheim."
≡ ***Inonotus pseudoradiatus*** (Pat.) Ryv., *comb. nov.* Basionym: *Polyporus pseudoradiatus* Pat., BSMF 11:207, 1895.

Fruitbody annual, flabellate and fan-shaped, 7 cm wide and 6 cm long at the margin, base contracted and attached only with about 1 cm of the pileus, 1 cm thick at the base, rather fragile when dry; below the upper pileus there is a small pileus indicating an imbricate growth form. Pileus radially folded, dull, azonate, finely adpressed velutinate, reddish brown. Pore surface dark rusty brown, pores angular 3-4 per mm, up to 5 mm deep. Context rusty brown, dense, somewhat shiny, 5 mm thick. Hyphal system monomitic, generative hyphae simple septate, thick-walled, yellow to rusty brown, 3-8 µm wide. Setae abundant, straight, acute and dark brown, 20-40 × 8-12 µm wide. Spores not seen.

G. puberulum, BSMF 30:343, 1914.
"Doungout [Zaire], sur la sol de la forêt, 3 avril 1912, Boudon no. 1964."
= *Amauroderma preussii* (Henn.) Stey.
P. purpureobadius, BSMF 8:53, 1892.

"Brazzaville [Zaire], leg. Dybowski 1891."
= *Coriolopsis caperata* (Berk.) Murr. Already indicated by Bresadola on the isotype in S.

G. rachodes, BSMF 30:343, 1914.
"Congo, M. Baudon 2221, Reçu en juin 1913."
= Accepted species in *Ganoderma*.

Fruitbody pileate, applanate, up to 12 cm wide and 4 cm thick at the base. Pileus glabrous, dull, azonate, slightly rimose, ochraceous and without a distinct cuticle, but covered with a thin layer of parallel adpressed fibers. Pore suurface dark brown, pores round to angular, about 6 per mm, tubes concolorous, up to 20 mm deep. Context brown and duplex, lower part rather dense and dark brown and with several black melanoid bands, the upper part loose and cottony and cinnamon brown and paler than the lower part. Hyphal system trimitic, generative hyphae with clamps, 2-5 μm wide, binding hyphae few, up to 5 μm wide in main stem, skeletal hyphae dominating in tubes and context, in the latter mostly unbranched, thick-walled and yellow to pale brown, 4-10 μm wide, in the tubes dendroid in the upper part, 4-7 μm wide, the adpressed cover of the pileus consists of parallel agglutinated skeletal hyphae without any vertical structures. Spores truncate, pale yellow and asperulate with double walls, 9-11 × 6-7 μm.

The species is rather easy to recognize because of the agglutinated hyphal layer on the pileus and the duplex consistency of the context. The spores are within the normal variation of the *G. lucidum* complex, which, however, have a palisade of vertical clavate elements making the pileus glossy.

X. radiatovelutinus, AM 5:365, 1907.
"Prov. São Paulo, Campinas fev. 1897, leg. Noack no. 135."
= *Inonotus patouillardii* (Rick.) Imaz.

P. reticeps, BMP 30:408, 1924.
"Environs de Maromandia, Madagascar, 28 fev. 1923, leg. R. Decary."
= *Albatrellus pilosus* (Petch) Ryv.

H. reysii, Leafl. Phillip. Bot. 6, art. 104:2246, 1914.
"On dead branches, Los Baños P.I. [Phillipine Islands], May 13. Reyes no. 1142."
= *Megasporoporia setulosa* (Henn.) Rachj.

P. rhizophilus, JB 8:219, 1894. FIG. 5 G.
"Haute plateau entre Tebessa et Bou [Tunisia], Chebeka du nord de l'Afrique, sur chez de gramin."
= Accepted in the genus; for a description, see Domanski et al. (1973:136).

H. rhodophora, BSMF 28:33, 1912.
"Guinée Française [Guinea], M. Boue 1905-06."

= *Hexagonia tenuis* (Hook.) Fr., a somewhat untypical specimen with renewed growth of hyphae from the base.

Poria richeriae, BSMF 15:200, 1899. FIG. 5 A-F.

"Sur le trone d'un *Richeria grandis*, Guadeloupe, B. de B. Tannes no. 587."

≡ *Porogramme richeriae* (Pat.) Pat., Essai tax. p. 64. 1900.

Fruitbody resupinate, adnate, hard and in the type forming numerous polygons, 1-2 × 1-3 mm, up to 1 mm thick. Pore surface pure white and with a very shallow pattern of irregular angular pores, about 10-15 per mm. Tubes white to pale cream, very dense and hard, context as such not visible.

Hyphal system monomitic, generative hyphae with clamps, in the trama thick-walled and strongly agglutinated, difficult to separate in KOH, but with distinct clamps, 2.5-5 μm wide, in the subhymenium thin-walled and 2-4 μm wide. Basidia clavate, 15-18 × 3-5 μm with 4-sterigmata, 2-5 μm long in the few inflated basidia seen in the type. Cystidia or cystidioles present as ventricose, thin-walled organs, a few seen with a papilla, 15-20 × 3-6 μm. Spores broadly ellipsoid, thin-walled and IKI-negative, 3-4 × 2-2.5 μm. Known only from the type specimen collected in Guadeloupe.

The species is characterized by its white color, the cracked fruitbody, the dense structure, the cystidioles and small spores.

X. rickii, BSMF 24:6, 1908.

"Bresil, Rick 1906."

= *Inonotus rickii* (Pat.) Reid. For a description, see Pegler (1964:183).

G. rivulosum Pat. & Har., BSMF 22:199. 1906.

"Java, M. Serre."

= *Ganoderma weberianum* (Bres. & Henn.) Stey. For a description, see Steyaert (1972:79).

P. roseoisabellinus Pat. & Gail., BSMF 4:35, 1888. FIG. 5 H, J.

"Puerto Zamuro, 25 nov. 87, sur un grand arbre [Leguminosae]."

≡ ***Perenniporia roseoisabellina*** (Pat. & Gail.) Ryv., *comb. nov.* Basionym. *P. roseoisabellinus* Pat. & Gail., BSMF 4:35, 1888.

Fruitbody resupinate, effused, tough, up to 5 mm thick in center, margin 1-2 mm wide, finely velutinate, pale cream, pore surface isabelline-pale cafe au lait, pores angular, 2-3 per mm, some sinuous to elongated up to 1 mm long and 0.3 mm wide, tubes 1-2 mm deep, pale cork-colored, context as tubes, 1 mm thick.

Hyphal system dimitic, generative hyphae hyaline and with clamps, 2-3 μm wide, skeletal hyphae straight, simple to branched and dendroid, 1.5-2.5 μm wide with whip-like hyphal ends, non-dextrinoid. Spores truncate, thick-walled and dextrinoid, 7-9 (up to 10 μm in KOH) × 5-7 μm.

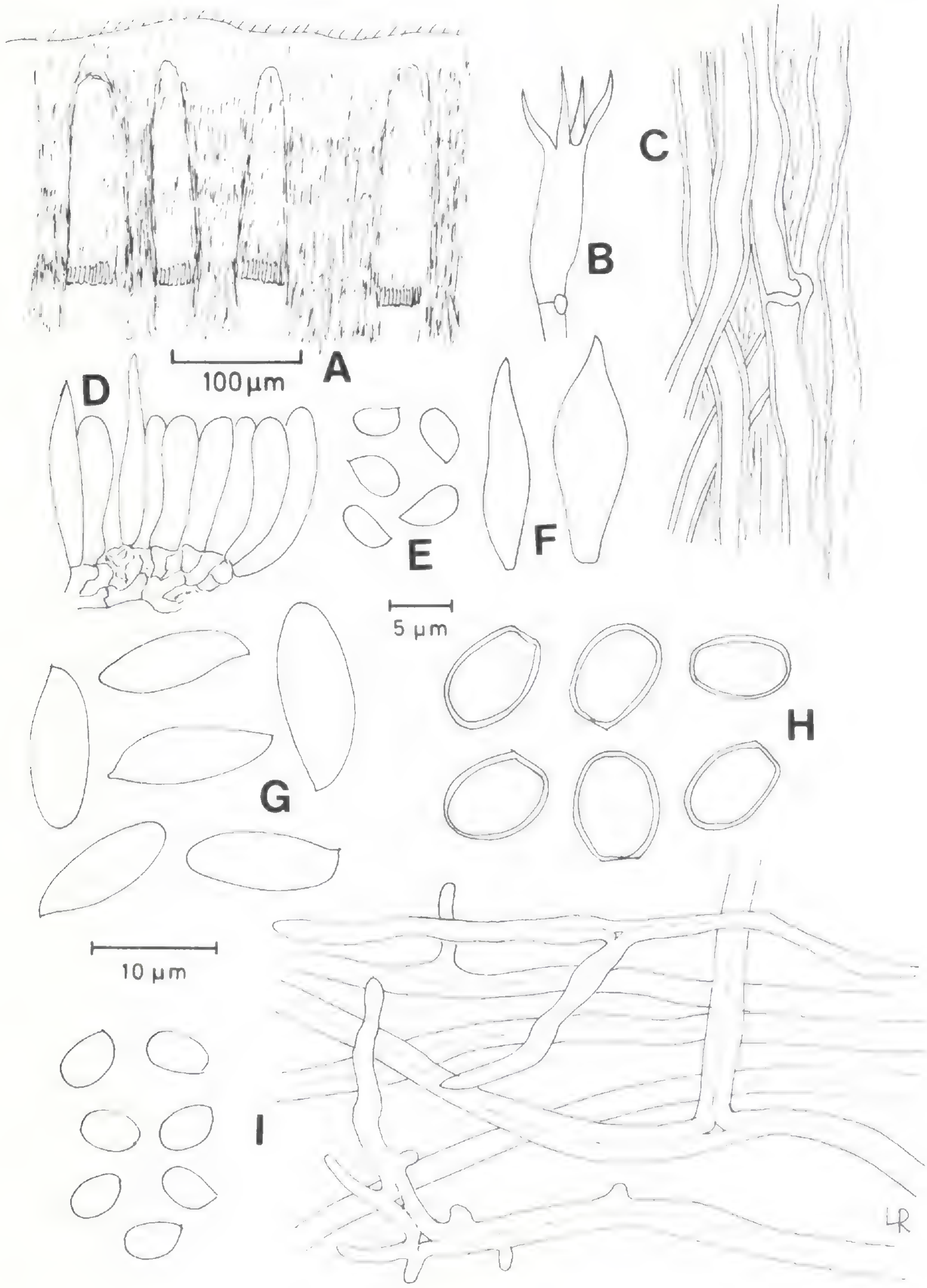

FIG. 5. *Porogramme richeriae* A) section through fruitbody, B) basidium, C) hyphae from trama, D) section through the hymenium, E) spores, F) cystidioles. *Polyporus rhizophilus* G), spores. *Perenniporia roseoisabellina* H), spores. *Polyporus violaceomaculatus* I) spores and skeletal hyphae. From the type specimens.

The species is related to *P. medulla-panis* in having the same type of slightly branched, thin skeletal hyphae, but is separated by larger spores and pores.

T. roseola Pat. & Har., JB 14:239, 1900.
"Carabory, Casamance, leg. Chevalier [Ivory Coast]."
= Accepted species in *Trametes*; for a description, see Ryvarden & Johansen (1980:581).

F. roseoporus, AJB suppl. 1:111, 1897.
"Java, leg. Massart no. 1381."
= *Fomitopsis rhodophaeus* (Lév.) Imaz.

P. rubricosus Pat. in Heim, BSMF 43:25, 1927.
"Annam [Viet Nam], Massif de Dong Tri, pr. Quang Tri. 16.6.24. Poilane no. 11007."
= *Albatrellus pilosus* (Petch) Ryv.

The type specimen is badly contaminated and seems to have been treated with some liquid since the consistency now is resinous, hard and the hyphal structure very difficult to ascertain. However, spores of the same type as in *A. pilosus* were found in the hymenium.

X. rudis, BSMF 23:83, 1907.
"Maijirgui, 17 mai 1906. [Sudan]. M. Chudeau."
= *Phellinus linteus* (Berk. & Curt.) Teng

G. rufobadium, BSMF 5:78, 1889.
"Puerto Zamero [Venezuela], mai 1887, A. Gaillard no. 283."
= *Amauroderma exile* (Berk.) Torr. Indicated on the sheet also by F. Furtado

P. rufoochraceus, JB 3:257, 1889.
"Weddell, Brésil."
= *Microporellus obovatus* (Jungh.) Ryv.

P. sanctigeorgii, BSMF 14:207, 1895.
"San Jorge, Equateur, Lagerheim, juin 1892."
= *Phellinus sanctigeorgii* (Pat.) Ryv. For a description, see Ryvarden & Johansen (1980:212).

P. savoyanus, RM 13:136, 1891.
"Pimichim, [Venezuela], 26 oct. 1898, leg. L. Savoye."
= *Polyporus leprieuri* Mont.

Mel. scabellus, BSMF 16:178, 1901.
"Pointe Noire, Guadeloupe, Duss no. 983."
= *Polyporus dictyoporus* Mont.

H. scleroderma Pat. & Har., BSMF 28:280, 1912.
"Guideko [Guinea], 18 mai 1907, leg. A. Chevalier."
= *Daedalea sprucei* Berk.

P. sericeus Pat. in Pat. & Lagerheim, BHB 3:53, 1895.
"Pinchincha, [Ecuador], juin 1892, Lagerheim."
= *Trametes villosa* (Fr.) Kreisel
H. seuratii, BSMF 22:48, 1906.
"Iles Gambier, Rikitea [Tahiti], leg. Seurat, Reçu 13 Fev. 1904."
= *Lenzites vespacea* (Pers.) Ryv.
Grammothele simplex, BMP 29:333, 1923.
"Cho Ganh Tonkin, [Viet Nam], Duport 32."
= *Grammothele lineata* Berk. & Curt.
P. spermolepidis, BSMF 14:153, 1898.
"Sur tronc de *Spermolepis gemmifera*, Nouvelle Calédonie."
= *Piptoporus portentosus* (Berk.) Cunningh.
Ph. stabolurum, BSMF 23:74, 1907.
"Tonkin [Viet Nam], Eberhardt LBA no. 268."
= *Phellinus gilvus* (Schw.) Pat. with an irregular pore-surface.
Ph. stratosus Pat. in Heim, ACE 1:13, 1928.
Type specimen not found.
X. stupparius, BSMF 39:51, 1923.
Type specimen not found.
C. subcalvus, BSMF 30:342, 1914.
"Congo, M. Boudon 2218."
= *Trametes modesta* (Fr.) Ryv.
S. suberis, Pl. Cell. Tunisie p. 48, 1897.
"El Fedja, Tunisie."
= *Spongipellis delectans* (Peck) Murr.
S. stramineus, BSMF 24:166, 1908.
"Nouvelle Calédonie, M. le Rat no. 94."
= *Oxyporus molissimus* (Pat.) Reid
G. subrugosum Bres. & Pat., BSMF 5:77, 1889.
"Nouvelle Calédonie, Herb. Pancher, Mus. Neocal. 721." Selected as lectotype.
= *Amauroderma rugosum* (Blume et Nees ex Fr.) Torr.
X. tamaricis, BSMF 20:51, 1904.
"Laghouat, Algérie, leg. Serre, oct. 1903."
≡ *Inonotus tamaricis* (Pat.) Maire. For a description, see Pegler (1964:187).
Poria tephra Pat. in Pat. & Lagerheim, BHB 3:208, 1895.
"San Jorge, [Ecuador], juillet 1895. Lagerheim."
≡ ***Tyromyces tephrus*** (Pat.) Ryv., *comb. nov.* Basionym: *Poria tephra Pat.*, BSMF 11:208, 1895. For a description, see Lowe (1966:63).
Echinodia theobromae, BSMF 34:199, 1918.
Nomen nudum, not validly published, see Ryvarden & Johansen (1980:325).

H. tollonis Pat. in Pat. & Har., BSMF 9:208, 1893.
Type specimen not found.
Mel. tunetanus, BSMF 18:50, 1902.
"El Fedja, Tunisie, avril 1901."
≡ *Polyporus tunetanus* (Pat.) Sacc.

Fruitbody stipitate, annual, arising from a sclerotium in the ground, hard when dry, probably coriaceous when fresh. Pileus 2-5 cm in diameter, circular, depressed in center, smooth, pale brown (preserved in alcohol) to ochraceous, finely adpressed velutinate at margin, somewhat radially wrinkled. Stipe 3-6 mm in diameter, ochraceous, subterranean parts dark brown, wrinkled and dense. Pore surface white to ochraceous, pores angular about 2 per mm, tubes pale brown now, 3 mm deep. Context pale cream, 2-4 mm deep.

Hyphal system dimitic, generative hyphae with clamps, 2-5 μm wide, dendroid binding hyphae present, up to 10 μm wide in main stems often with short side branches, spores cylindrical, smooth and thin-walled, 6-8 × 2-2.5 μm.

The species is related to *Polyporus meridionalis* (David) Jahn and *P. rhizophilus* (Pat.) Sacc., both growing on the ground, but which have wider spores (3-4.5 μm wide).

X. tuniseus, BSMF 13:200, 1897.
"Tunisie, Bab el Kadra, troncs de *Robinia*, 8 mars 1897."
= *Phellinus rimosus* (Berk.) Pilát
Leucop. turbinatus Pat. & Har., BSMF 22:117, 1906.
"Java, M. Serre."
= *Polyporus dictyopus* Mont.
P. turbinatus, RM 13:137, 1891.
"Branche mort de Bignonia, Baudal [Venezuela], juillet 1887."
= *Perenniporia ochroleuca* (Berk.) Ryv.
Mel. umbrinofuscus, BMP 29:334, 1923.
Type specimen not found.
H. velutina Pat. & Har., BSMF 9:209, 1893.
"Congo, leg. Dybowski."
= Accepted species in *Hexagonia*; for a description, see Ryvarden & Johansen (1980:378).
Leucop. velutipes, BSMF 25:5, 1909.
"Fondiriere de plateau de Dirin, Tonkin [Viet Nam], Eberhardt 80."
= *Polyporus dictyopus* Mont.
P. violaceomaculatus, BSMF 23:72, 1907. FIG. 5 J.
"Sur le sol, Tonkin [Viet Nam], Eberhardt LBA 272." This is an accepted species in *Polyporus* s. str.

Fruitbody centrally to laterally stipitate, in the type as if two fruitbodies have fused, giving the compound fruitbody a circular, lobed and undulating pileus; if single it may be that the pileus is somewhat spathulate to semi-circular. Pileus 8 cm in diameter, and 2-4 mm thick, pale sienna brown, dull, azonate, finely adpressed velutinate, rugulose in parts and also somewhat radially wrinkled (probably smooth when fresh). Stipe 4 cm long and 8 mm in diameter consisting, in the type, of two joined or fused stipes, dull brown, in parts dark ochraceous, finely velutinate (lens). Pore surface dirty-brown, cartilaginous to resinous and brittle, pores angular and thin-walled, 5-7 per mm, tubes up to 2 mm deep. Context much lighter than tubes, ochraceous, cheesy and crumbly of consistency, both in pileus and in stipe.

Hyphal system dimitic, generative hyphae not seen even after very prolonged examinations, probably with clamps, arboriform binding hyphae totally dominating, thick-walled to solid, 3-7 μm wide in the main stems. Spores broadly ellipsoid, thin-walled, hyaline and non-amyloid, 3.5-4.5 × 2.5-3.0 μm. On the ground.

The species is characterized by its dull, somewhat fragile fruitbody, the small pores, and above all by the small spores. Most species in *Polyporus* s. str. have larger and more cylindrical spores. Fresh or properly dried material would be most welcome.

Ph. violascens, BMP 29:335, 1923.

"Annam [Viet Nam], Nha-trang, 4.7.1922, leg. Poilane 4392."

= *Coriolopsis badius* (Berk.) Murr., an old specimen in which the pileus surface has become more black than usual. The type specimen is sterile, but microstructure and pore size are as in *C. badius*.

Lep. fragilis var. *violascens*, BSMF 25:5, 1909.

"Plateau de Land Bian. Tonkin [Viet Nam]."

The type specimen is badly discolored and soaked with some resinous substances, probably due to a prolonged submersion in formaldehyde (as indicated by Patouillard). Thus, it is difficult to settle its proper features. It probably belongs in *Tyromyces*.

X. waterlotii, BMP 30:409, 1924.

"Sur un bibassier, aout 1914, Tananarive, Madagascar, M. Waterlot no. 202."

= *Phaeolus schweinitzii* (Fr.) Pat.

It is surprising to find this assumed boreal species in tropical Africa. I have seen the species in Colombia and it may have a wide distribution, although it must be considerably rarer in the tropics than in the northern temperate zone. Spores, hyphal structure and cystidia were all typical in the collection from Madagascar.

G. xanthocreas Pat. in Heim, BSMF 43:30, 1927.

Type specimen not found.

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